Delta Methylmercury TMDL & Basin Plan Amendment: CEQA Scoping & Public Workshop (29 September 2005)

Participant Questions & Comments

Oral questions and comments are summarized in the table below. Written comments are provided after the table.

Name	Approx. Order	Affiliation	Slide #	Topic	Summary of Questions and Comments
Vicki Fry	1	SRCSD	28	Margin of Safety (MOS)	o How did the Regional Board staff determine the margin of safety?
Paul Buttner	2	California Rice Commission	28	Margin of Safety	o How does the 18% MOS compare with MOS types and amounts used for other TMDLs? o Who determines the MOS?
Paul Buttner	3	California Rice Commission	25	General	o Mr. Buttner had questions about Yolo Bypass flows versus Sacramento River flows.
Vicki Fry	4	SRCSD	27	General	o A correlation [between fish & water MMHg] is not the same as causation. o What is the relationship between the Cache Creek TMDL & the Delta TMDL targets?
G. Fred Lee	5	GFL & Associates	27 & 33	General	o Error bars are needed on the regression graph to indicate the confidence limits & the number of fish so that the reader can see the scatter. o How do the SFB and Delta TMDLs coincide? o Why is the Delta not already listed for COMM?
G. Fred Lee	6	GFL & Associates	37	Fish Tissue Objective	o There was no consideration of subsistence fishing in the Fish Tissue Objective table. The targets are based on average consumption rates. However, there are high rates of fishing along the Stockton Deep Water Ship Channel (DWSC), mainly by economically disadvantaged and minorities. o The State Board is required to take into consideration environmental justice issues. What are the requirements for EJ under the TMDL program? o The CALFED Fish Mercury Project Steering Committee has spent much time discussing the environmental justice issues related to mercury control. Steering Committee members should be contacted to review/be involved in fish tissue objective selection.

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Dave Tamayo	7	Sacramento County SWP	37	Fish Tissue Objective	o There is no fish consumption information for the Delta [anglers], however the data exist for the San Francisco Bay. Is there reason to assume the consumption rates are that much different?
Vicki Fry	8	SRCSD	37	Fish Tissue Objective	o SRCSD is doing a mercury bioaccumulation study in the vicinity of its outfall to the Sacramento River. It includes surveys asking who is fishing, what species are being fished, how much the anglers eat, and other questions. The findings of the study are expected to be available by mid to late 2006. o Why impose the USEPA's schedule on the Delta TMDL when useful information is pending? o The outreach and education element of the TMDL is an effort that is already being implemented by DHS. They have a nearly $1M grant through CalFed for a Delta fish consumption study. o The CVRWQCB staff should know about the details of DHS's grant since staff participates on DHS's Delta Fish Project fish consumption work group.
G. Fred Lee	9	GFL & Associates	23 & 37	Delineation of Subregions & Allocations	o The San Joaquin River subregion boundary should be extended to include the Stockton DWSC downstream to Turner Cut, a reach currently in the Central Delta subregion. o There is substantial subsistence fishing in the Stockton DWSC just downstream of the Stockton Wastewater Treatment Plant outfall. o Turner Cut is not on the map. It should be highlighted on the map because it is critical to the understanding of the overall hydrology of the south Delta. o There is a concern with the Central Delta subregion allocation being applied to the DWSC portion of the San Joaquin River because substantial subsistence fishing occurs there. o The Sacramento River subregion should be extended into the Central Delta downstream to at least Columbia Cut because the pumps in the south Delta draw Sacramento River water deep into the Central Delta. o The Regional Board staff should carefully review the fish mercury gradients in the Sacramento and San Joaquin subregions.

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Kari Burr	10	DeltaKeeper	37	Fish Tissue Objective	o What are the fish sample sizes and mercury levels in the Deep Water Ship Channel area? o There is a lot of fishing in the San Joaquin River near the Stockton Wastewater Treatment Plant outfall. o DeltaKeeper is involved in the CalFed-funded consumption study.
Paul Buttner	11	California Rice Commission	47	Agriculture	o For the rice growers the issue is mercury in surface water from the Sierra Mountains. Mercury enters the rice fields in the irrigation water. It is not appropriate to require the agriculture growers to decrease the concentration of total mercury when its source is not the fields themselves. o It is difficult to determine how significant an impact these general implementation options may cause because the impact may be different for each individual project. For example, changes to one acre of rice may have a significant impact because it may be an acre of shorebird habitat that will not be available as a wintering habitat.
G. Fred Lee	12	GFL & Associates	47	Dredge Disposal	o Mud and Salt Slough water quality characteristics change with changing flow management, and as a consequence the methylmercury output to and within the Delta. o Methylmercury is a function of pH. Acidity in the waters of the Stockton DWSC at the port of Stockton can cause increased methylmercury production. Reuse of dredge sediments has to be carefully reviewed for use in Delta levees.
G. Fred Lee	13	GFL & Associates	47	Soil	o UC-Davis has a superfund site. Need to prevent additional bioaccumulation caused by the site. o The soil in Davis has a high concentration of total mercury, which is an excessive source to Putah Creek.

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Dave Tamayo	14	Sacramento County SWP	47	MS4	o Reiterates what Paul Buttner said: It is hard to say what the environmental impacts will be without the specifics. It is hard to predict the environmental impacts from new urban areas/development projects. For example, there will be more impervious areas (less methylation?), but there will be more car emissions.
Stephen McCord	15	LWA	47	NPDES Facilities	o In 4 to 6 years, by the time the feasibility studies are performed and the results are back, the TMDL/ Basin Plan Amendment would have been approved. CVRWQCB staff will be working on other TMDLs. o How will Regional Board permit writers address the study results in permits? Will it be permit by permit? o Suggested the Regional Board conduct another CEQA Scoping when the studies are completed for this Phase 1 TMDL and project-specific control programs are required in a Phase 2 TMDL. The TMDL should clarify that a Phase 2 TMDL and Basin Plan amendment will address controls based on results of the Phase 1 studies.
Vicki Fry	16	SRCSD	47	NPDES Facilities	o SCRSD spent three years in an open public process to develop a mercury offset feasibility study for the CVRWQCB including a broad range of stakeholders. Including: USEPA, EPA Region IX, CVRWQCB staff, Industry, land use managers, and other NPDES permittees from the Central valley. SRCSD has had discussions with SWRCB and CVRWQCB staff concerning a Mercury Offset project for our district in advance of and as an initial step toward a Mercury Offset Program for the Delta. SRCSD strongly suggests that both our offset project and the Delta program must be acknowledged, referenced, and incorporated into the TMDL and basin Plan Amendment.

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Vicki Fry	16.5	SRCSD	43 & 44	General	o How long will it take to comply with the San Francisco RWQCB total mercury load reduction of 110 kg/year [assigned to the Central Valley]? o How long will it take to achieve the proposed fish tissue objective for the Delta? o DHS already has fish consumption studies underway. The most efficient way to reduce exposure to methylmercury on the Delta fish eating public is through education of the fish advisories. Why isn't there (in the Delta TMDL) a focused action to address the risk to the fish eating public?.
Kari Burr	17	DeltaKeeper	44	General	o Impacts of mercury to both humans and wildlife need to be addressed. Therefore, it is important to address the TMDL/Basin Plan Amendment holistically, to address the sources of methylmercury to ambient water. o DeltaKeeper acknowledges that it will take a long time to achieve the water quality objective.

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Warren Tellefson	18	Central Valley Clean Water Association	47	NPDES Facilities	o For the purpose of CEQA analysis, the Regional Board staff needs to fully evaluate and compare the relative costs and benefits (in terms of MMHg load reductions) of the complete range of alternatives regarding POTWs and other sources. o Evaluate the mercury-offset program. What is the cost and benefit? o Evaluate alternative pollution prevention programs. o Evaluate the cost of growth. o What will the permit writers have to do? NPDES permit writers could include in the permits a requirement for 0.06 ng/L before studies are completed. o There are many POTWs that can undertake these studies. Can cities collaborate to perform these studies (characterization, identification of loads and feasibility studies)? o What are the social and economic costs? What is the cost and benefit of implementation actions for a source [POTWs] that contributes only 4% of the methylmercury load to the Delta? o *Tellefson submitted written comments, which are provided at the end of this table.*
Vicki Fry	19	SRCSD	47	NPDES Facilities	o The Regional Board should acknowledge that studies are expensive. o Fry reiterated Warren Tellefson's questions regarding the cost and benefit of implementation actions for a source [POTWs] that contributes only 4% of the MMHg load to the Delta. Is the POTW money well spent? o *Fry submitted written comments, which are provided at the end of this table.*
Stephen McCord	20	LWA	29, 42 & 47	NPDES Facilities	o Do the allocations apply to tributary watersheds? o If a facility's effluent is less than the 0.06 ng/L MMHg ambient water goal, what applies?

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Dave Lawler	21	BLM-CASO-AML	47	Soil / Sediment / Mine Tailings	o Are we going to include mine tailings? o Is the Regional Board staff assuming there is no significant input of mine tailings within the Delta? o If there were contaminated soil behind a levee or in the floodplain, would the implementation include dredge tailings?
John Key	22	BLM-CASO-HazMat	47	Soil / Sediment / Mine Tailings	o Hydrologic mining occurred about 1850 to 1900. What about mercury mines? What about Cache Creek? o Silver Creek is an ephemeral inland creek that could be a source.
G. Fred Lee	23	GFL Associates	47	Dredging	o Can dredge tailings be used as a sediment source for wetland/riparian restoration?
Vicki Fry	24	SRCSD	47	Dredging	o The San Francisco Regional Board disregarded dredging.
Dave Tamayo	25	Sacramento County SWP	47	Dredging	o Dredging can mobilize mercury and should be considered a source.
Mary Menconi	26	CalFed	47	Wetlands	o There is a potentially significant environmental impact due to loss of wetland habitat [from MMHg control practices]. o Wetlands also have positive water quality and flood control functions.
Kari Burr	27	DeltaKeeper	47	Wetlands	o We need to think about the process of methylation. We have to make certain that the wildlife we are supporting is not negatively affected. We do not want another Kesterson.
Dave Tamayo	28	Sacramento County SWP	47	Water Management	o There are water management issues that have the potential to generate methylmercury in open channels, such as those practices affecting sulfate concentrations. It could be a master driver.

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G. Fred Lee	29	GFL Associates	47	Water Management	o How do water management operations of the barriers at the Head of Old River affect methylation? Future water development will affect methylation. This concern should be evaluated in the EIS/EIR for the South Delta Improvements Project. All water management, development and Delta export changes should be evaluated [in terms of methylation] regarding obtaining future permits. o Does the wetlands category include upstream refuges?
G. Fred Lee	30	GFL Associates	47	Water Management	o Other TMDLs may change water management practices. For example, there have been changes in watershed management in the San Joaquin River watershed.
Dave Tamayo	31	Sacramento County SWP	47	Water Management	o Water management issues have the potential to effect wetlands. Why isn't it in this category?
Stephen McCord	32	LWA	47	Wetlands	o The Yolo Bypass includes flood management, wildlife habitat, rice, and complicated hydrology & hydraulics. o Is the 5000-acres of wetlands in the Vic Fazio Wildlife Area addressed in the implementation options?
Dave Tamayo	33	Sacramento County SWP	47	Wetlands	o Is there an allocation for upstream tributaries? Will the upper Sacramento River be addressed in future TMDLs?

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Written Comments

Vicki Fry, Sacramento Regional County Sanitation District (SRCSD)
Offsets: SRCSD spent three years in an open public process to develop a mercury offset feasibility study for the CVRWQCB including a broad range of stakeholders. Including: USEPA, EPA Region IX, CVRWQCB staff, Industry, land use managers, and other NPDES permittees from the Central Valley. SRCSD has had discussion with SWRCB and CVRWQCB staff concerning a mercury offset project for our district in advance of and as an initial step toward a Mercury Offset Program for the Delta. SRCSD strongly suggests that both our offset project and the Delta Program must be acknowledged, referenced, and incorporated into the TMDL and Basin Plan Amendment.

Characterization of Discharges: The TMDL utilizes average annual concentrations to represent ambient aqueous conditions, fish tissue concentrations, sediment flux, and pretty much every parameter except the example of SRCSD's discharge. To clarify, methylmercury concentrations increase 7% between Sacramento River at Freeport and River Mile 44 encompassing SRCSD's outfall. SRCSD's effluent methylmercury load (0.18kg/yr) is 8% of the river load (1.63 kg/yr) measured at Freeport. SCRSD's contribution based on average flow and concentration data in Appendix G is 0.15 kg/yr or 6% of the total load to the Delta.

Clarify load reduction for dischargers of MeHg > 0.06 ng/L. As currently written, a discharger of 0.07 ng/l would have to reduce or study ways to reduce MeHg to 0.035 ng/L, while a discharger of 0.05 ng/L would not be required to reduce or study ways to reduce MeHg concentrations.

Warren Tellefson, Central Valley Clean Water Agency (CVCWA)
CVCWA has prepared a technical report summarizing the results of the 13267 methyl mercury monitoring that POTWs were required to perform by the Regional Water Board. The results from that study provide a reasonable picture of the relative significance of POTWs loads of methyl mercury in comparison to other sources. Preliminary indications are that methyl mercury inputs from POTWs are very small in comparison to in-system sources of methyl mercury.

CVCWA has agreed to work cooperatively with the Regional Water Board to provide additional information regarding the methyl mercury concentrations produced by different types of wastewater treatment facilities. CVCWA shares an interest with the Regional Water Board in determining whether cost-effective measures can be taken to reduce methyl mercury levels in effluent.

For the CEQA analysis, CVCWA is interested that the RWB bring forward information to fully evaluate and compare the relative costs and benefits (in terms of MeHg load reduction) of the complete range of alternatives regarding POTWs. The CEQA alternatives discussion must include an analysis of least the following alternatives, and potentially others:

1. The proposed plan to require POTWs with effluent concentrations of MeHg above 0.06 ng/l to reduce those concentrations by 50 percent;
2. An alternative plan to require POTWs to implement mercury pollution prevention programs and low cost methyl mercury treatment process optimization measures;
3. An alternative plan to require POTWs to hold total mercury loadings at existing levels;
4. An alternative plan to allow increases in POTW mercury loadings commensurate with growth.

Furthermore, as an alternative for implementation efforts, a mercury-offset program must be described and evaluated in the CEQA document. CVCWA supports the idea of a mercury offset program that does not unfairly leverage POTWs beyond their proportional contribution to impairment.